# PATENT COOPERATION TREATY

# Translation

# **PCT**

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference FOR FURTHER ACTION SeeNotification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)				
International application No.	International filing date (day/month/year) Priority date (day/month/year)			
PCT/JP03/16155	17.12.2003 25.02.2003			
International Patent Classification (IPC) or n	ational classification and IPC			
Int. C17 B22F3/10				
National Institute	of Advanced Industrial Science and Technology			
This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.				
2. This REPORT consists of a total of	sheets, including this cover sheet.			
amended and are the basis fo 70.16 and Section 607 of the	This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).			
These annexes consist of a to	otal of sheets.			
3. This report contains indications rela	iting to the following items:			
I X . Basis of the report	I X. Basis of the report			
II Priority	II Priority			
III Non-establishment	of opinion with regard to novelty, inventive step and industrial applicability			
IV Lack of unity of inv	vention			
V X Reasoned statement citations and explan	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			
VI Certain documents	VI Certain documents cited			
VII Certain defects in the	VII Certain defects in the international application			
VIII Certain observations on the international application				
Date of submission of the demand	Day of completion of the			
	.0 -2 21			
18. 03. 2004	24. o9. zoo4			
Name and mailing address of the IPEA/JP	Authorized officer			
Facsimile No.  Telephone No.				

International application No.

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

PCT/JP03/16/55

1. With regard to the elements of the international application:*	
the international application as originally filed	
the description:	
pages $1\sim 14$ , as originally	filed
pages, filed with the de	
pages, filed with the letter of	
X the claims:	_
pages $5, 7, 8, 10 \sim 13$ , as originally	filed
pages 1 ~ 4, 9 , as amended (together with any statement under Artic	cle 19
pages, filed with the de	
pages, filed with the letter of	
X the drawings:	
	- Fled
, as Original	
pages, filed with the de	mane.
the sequence listing part of the description:	<del></del>
nages	
pages, as originally	
pages, filed with the de	mand
pages, filed with the letter of	
2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in the international application was filed, unless otherwise indicated under this item.  These elements were available or furnished to this Authority in the following language which is the state of the stat	
the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).	
the language of publication of the international application (under Rule 48.3(b)).	
the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 or 55.3).	
3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the interna preliminary examination was carried out on the basis of the sequence listing:	iional
contained in the international application in written form.	
filed together with the international application in computer readable form.	
furnished subsequently to this Authority in written form.	
furnished subsequently to this Authority in computer readable form.	
The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in international application as filed has been furnished.	
The statement that the information recorded in computer readable form is identical to the written sequence listing been furnished.	, has
4. X The amendments have resulted in the cancellation of:	
the description, pages	ļ
$\overline{X}$ the claims, Nos. 6, 14	
the drawings, sheets/fig	
This report has been established as if (some of) the amendments had not been made, since they have been considered to beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**	o go
* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referre in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 7 and 70.17).	ed to 0.16
** Any replacement sheet containing such amendments must be referred to under item I and annexed to this report.	

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP 03/16/55

Statement	,	
Novelty (N)	Claims $1 \sim 5$ $7 \sim 13$	YE
	Claims	NC
Inventive step (IS)	Claims $1 \sim 5$ , $7 \sim 13$	YE
	Claims	NO
Industrial applicability (IA)	Claims 1~5, 7~13	YE
	Claims .	NO

# PATENT COOPERATION TREATY



# **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference KG206PCT	FOR FURTHER	ACTION	See Form PCT/IPEA/416	
International application No.		late (day/month/year)	Priority date (day/month/year)	
PCT/JP2003/016155	<u> </u>	003 (17.12.2003)	25 February 2003 (25.02.2003)	
International Patent Classification (IPC) or national classification and IPC B22F 3/10				
Applicant				
NATIONAL INSTITUTE O	F ADVANCED II ——	NDUSTRIAL SCIE	INCE AND TECHNOLOGY	
This report is the international prelim     Authority under Article 35 and transi	ninary examination remitted to the applicant	port, established by this according to Article 36	International Preliminary Examining	
2. This REPORT consists of a total of	3 sheet	s including this cover of	hoot	
3. This report is also accompanied by A			neet.	
		_	sheets, as follows:	
a. (sent to the applicant and to the International Bureau) a total of 2 sheets, as follows:  sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).				
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.				
b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))  readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).				
4. This report contains indications relating to the following items:				
Box No. I Basis of the rep	ort			
Box No. II Priority				
Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability			ve step and industrial applicability	
Box No. IV Lack of unity of				
Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
Box No. VII Certain defects in the international application			·	
Box No. VIII Certain observations on the international application				
Date of submission of the demand  Date of completion of this report				
08 March 2004 (08.03.20	004)	24 September 2004 (24.09.2004)		
Name and mailing address of the IPEA/JP		Authorized officer		
Tamorized officer				
Facsimile No.  Telephone No.			1	

Translation

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/016155

			PC1/JP2003/016155
Box N	0. I	Basis of the report	
1. With	n regare rwise i	d to the language, this report is based on the international application in the landicated under this item.	anguage in which it was filed, unless
	This which	report is based on translations from the original language into the follows the is language of a translation furnished for the purpose of:	ing language,
		international search (under Rules 12.3 and 23.1(b))	
		publication of the international application (under Rule 12.4)	
		international preliminary examination (under Rules 55.2 and/or 55.3)	
J		to the elements of the international application, this report is based on the receiving Office in response to an invitation under Article 14 are refer annexed to this report):	n (replacement sheets which have been red to in this report as "originally filed"
	The in	nternational application as originally filed/furnished	
	the de	escription:	
	pages		, as originally filed/furnished
	pages	lectived by this Authority on	
	pages		
$\boxtimes$	the cl	aims:	
	pages	3, 7, 0, 10-13	, as originally filed/furnished
	pages	, as afficited (to	gether with any statement) under Article 19
	pages pages	received by this Authority on	
	-	received by this Additivity on	
$\boxtimes$		awings:	
	pages pages	1-16	, as originally filed/furnished
	pages	received by this Audionity on	
_		toodrod by this Authority on	
	a sequ	ence listing and/or any related table(s) – see Supplemental Box Relating to S	equence Listing.
<u> </u>			
3.	The ar	nendments have resulted in the cancellation of:	
		the description, pages	
	$\boxtimes$	the claims, Nos6, 14	
		the drawings, sheets/figs	
		the sequence listing (specify):	
		any table(s) related to sequence listing (specify):	
	,	eport has been established as if (some of) the amendments annexed to this since they have been considered to go beyond the disclosure as filed, as 70.2(c)).	report and listed below had not been s indicated in the Supplemental Box
	<u></u> 1	he description, pages	
	<u> </u>	he claims, Nos.	·
	□ t	he drawings, sheets/figs	
		he sequence listing (specify):	
		any table(s) related to sequence listing (specify):	1
			į
* If item	4 appl	ies, some or all of those sheets may be marked "superseded."	
		//00 /D N. T. /T	

International application No.

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

PCT/JP03/16155

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			
1. Statement			
Novelty (N)	Claims	1-5, 7-13	YES
	Claims		NO
Inventive step (IS)	Claims	1-5, 7-13	YES
	Claims		МО
Industrial applicability (IA)	Claims	1-5, 7-13	YES
	Claims		NO

2. Citations and explanations (Rule 70.7)

Document 1: JP, 53-120612, A (Inoue Japax Research Inc.), 21 October, 1978

Document 2: JP, 63-108191, A (Ishikawajima-Harima Heavy Industries Co., Ltd.), 13 May, 1988

Document 3: JP, 60-101480, A (Ishikawajima-Harima Heavy Industries Co., Ltd.), 05 June, 1985

Document 4: JP, 62-248553, A (Kubota Tekko Kabushiki Kaisha), 29 October, 1987

### Claims 1-5, 7-13

The inventions described in claims 1-5, 7-13 are not described in any of documents 1-4 cited in the ISR; nor can they be obviously or logically deduced by a party skilled in the relevant technical field based on prior art.